

Flying pig lab:

formal lab - Due Wednesday Nov 15th

purpose, hypothesis, procedure, data table, graph (skip max/min lines - can be done on spreadsheet as long as format is correct), % error, conclusions and sources of uncertainty
Quiz Nov 17th - circular motion and orbits

Handout - Q1-7

Test Energy, circular motion, orbits Nov 29th

eg. Satellites orbit the Earth under the influence of gravity. The international space station orbits at a height of 408km.

- a) what is g at that height?
- b) why do the astronauts seem weightless?
- c) what is the speed of the space station to stay in a uniform circular orbit?
- d) what is the period of revolution of the space station, in minutes?
- e) Geostationary satellites orbit over the same point on the earth. What can you tell me about the location and radius of the orbit?

Mass of Earth is $5.98 \times 10^{24} \text{ kg}$
radius of Earth is $6.38 \times 10^6 \text{ m}$ (assume uniform sphere)